carrying out convolutional coding for said blocks with a code rate of ½ by using GSM convolutional coding polynomes; and

puncturing the bits obtained, the puncturing including deleting bits from each block so that blocks containing no more than 456 bits will be obtained.

2. (Amended) A method as claimed in claim 1, wherein the block size after the convolutional coding is 584 bits, and the coded blocks obtained are punctured by deleting 128 bits from each block.

3. (Amended) A data transmission method in a digital cellular radio network, the method comprising:

channel coding information to be transferred for transmission, the channel coding comprising

grouping bits to be transmitted into blocks having the size of 290 bits;

inserting 4 tail bits into the blocks;

carrying out convolutional coding for said blocks with a ½ code rate by employing GSM convolutional polynomes so that after the coding the block size is 588 bits; and

puncturing the coded bits obtained by deleting 132 bits from each block.

4. (Amended) A method as claimed in claim 1 or 3, further comprising transferring the information to be transmitted in a transfer system by generating one frame from two transcoding frames by using a part of synchronization and control bit positions of the latter frame in the information transfer.

5. (Amended) A method as claimed in claim 1 or 3, further comprising transferring the information to be transmitted in a transfer system by generating a transcoding frame having a plurality of data octets, the first two data octets forming a synchronization pattern that consists of zeros, and said transcoding frame containing control bits and at least 288 bits of information to be transmitted.

6. (Amended) A method as claimed in claim 5, further comprising employing bits of the frame that have a known value for synchronizing of the transcoding frame.

7. (Amended) A method as claimed in claim 5, further comprising calculating a short checksum for some of the data octets used for transferring the information to be transmitted, transferring a cyclic redundancy check (CRC) value obtained by using spare control bits, and employing the CRC value is in synchronizing of the transcoding frame.

8. (Amended) A method as claimed in claim 5, further comprising modifying the information to be transferred so that the bit sequences comprised by the information differ from the synchronization sequences.

C1 cont'd.

9. (Amended) A method as claimed in claim 1 or 3, further comprising inverting each information bit prior to the transfer and deinverting each information bit after the transfer.

10. (Amended) A method as claimed in claim 1 or 3, further comprising transferring the information to be transmitted in a transfer system by generating a transfer frame whose total length is 640 bits and the information transferred by which is applied to a channel coder as two blocks with the length of 290 bits.

11. (Amended) A method as claimed in claim 10, further comprising inserting an identifier into the two blocks indicating whether a first block or a second block of the frame is in question.

C2

12. (Twice Amended) A method as claimed in claim 11, wherein the identifier is in a predetermined position in each block, and further comprising inverting the identifier of the first block to form the identifier of the second block.

C3

13. (Amended) A method as claimed in claim 12, wherein first bits of both frames are employed in transferring supplementary information over the air interface, and wherein the first bits are supplementary information bits.

14. (Amended) A method as claimed in claim 13, wherein the supplementary information bits are used for signaling discontinuous transmission.

15. (Amended) A method as claimed in claim 13, wherein the supplementary information bits are used for transmission of synchronization information.

16. (Amended) A method as claimed in claim 14, further comprising replacing the bit indicating discontinuous transmission in the first block of the frame at the base station with a fixed-value bit prior to channel coding, wherein the bit to be transmitted in the same position in the latter frame has an inverse value.

17. (Amended) A method as claimed in claim 4, further comprising generating the transfer frame at a network interworking unit.

18. (Amended) A method as claimed in claim 17, wherein the transfer frame comprises a radio link protocol frame.

See the attached Appendix for changes made to effect the above claims.